

**CARDIAC RHYTHM MANAGEMENT SYSTEM AND METHOD USING  
TIME BETWEEN MITRAL VALVE CLOSURE AND AORTIC EJECTION**

**ABSTRACT**

5           This document discusses cardiac rhythm management systems and methods  
using the MVC-to-AE time between mitral valve closure ("MVC") and aortic  
ejection ("AE") of the same heart contraction, sometimes referred to as the  
isovolumic contraction time ("ICVT"). In one example, the MVC-to-AE time is  
used for predicting which patients will respond to cardiac resynchronization therapy  
10 (CRT), or other therapy. In another example, the MVC-to-AE time is used as a  
wellness indicator. In a further example, the MVC-to-AE time is used to select or  
control a therapy or therapy parameter. In one example, the MVC and AE are  
obtained using an accelerometer signal, however, plethysmography, tonometry, or  
other techniques may alternatively be used.

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